Remarks

Claims 1-17, 25,26, 36-41, and 45-78 were pending in the subject application. By way of this amendment, claims 38, 45, 49, 50, and 78 have been amended. Favorable consideration is earnestly requested.

The Office Action acknowledges the applicant's request for a CPA under 37 CFR §1.53(d), but indicates that the request was improper. The applicants assert the request for a CPA was proper and request the request for CPA be reconsidered. Please note the request for CPA was filed on February 13, 2003 via facsimile. A courtesy copy of this request for a CPA was transmitted to the Examiner via facsimile on June 5, 2003.

The Office Action summary has both "This action is **Final**" and "This action is non-final" checked. As this is an initial Action with respect to the subject CPA, the applicants assume this action in non-final.

Claims 38 and 45 have been amended to address the rejection under 35 U.S.C. §112. In view of the amendments to claims 38 and 45, the applicants respectfully request reconsideration and withdrawal of the rejection of claims 38 and 45.

Claim 49 has been objected to. The applicants thank the Examiner for her careful reading of the subject application. Claims 49 and 50 have been amended to correct typographical errors. The applicants respectfully request reconsideration and removal of the object to claim 49.

Claims 1-11, 13-17, 25, 26, 36-41, 45-63 and 65-78 are rejected under 35 U.S.C. 102(e) as being anticipated by Su *et al.*, US patent 6,493,572 B1 issued December 10, 2002, with an effective filing date under 35 U.S.C. 102(e) of September 30, 1999. The applicants assert that the Su *et al.* reference does not teach each and every limitation of the subject invention as claimed in claims 1-11, 13-17, 25, 26, 36-41, 45-63, and 65-78. With respect to claims 11 and 63, the Su *et al.* reference does not teach a configuration, or method, wherein the zero-flux contour is located outside the pair of coils. Neither Figure 4 of the Su *et al.* reference, nor the specification of the Su *et al.* reference, teach such a limitation.

With respect to claims 14 and 66, the Su *et al.* reference does not teach a configuration, or method, wherein the single coil is positioned closer to one of the coils of the pair of coils than to the other. The coils in Figure 6 of Su *et al.* appear equispaced on the edges and the figure appears to fail to show the same curvature of the bottom coil. At column 9, lines 51-53 state that coil **2** surrounds the "center portion of breast **3**. There is not indication that coil 2 is closer to coil 1a or 1b.

With respect to claim 25 and 70, the Su *et al.* reference does not teach the limitation "wherein said pair of coils are connected together by a pair of electrical conductors to form an Alderman-Grant coil pair." Figure 9B (see page 10, line 24 through page 11, line 9) of the subject application shows a pair of coils **16B** and **18B** which are connected by a pair of electrical conductors to form an Alderman-Grant coil pair. Figure 7a-7b of the Su *et al.* reference does not teach such a limitation.

With respect to claims 37, 49-50, and 75, the Su *et al.* reference does not teach at least one additional pair of coils, wherein said pair of coils in an opposite orientation has odd symmetry with respect to a plane, wherein each of said at least one additional pair of coils has odd symmetry with respect to the plane. Coils 3 in Figure 8 do not have odd symmetry with respect to the plane.

With respect to claims 38-40, 45, and 78 (please note, claim 78 has been amended to correspond with claim 38), the Su *et al.* reference does not teach at least five RF coils with bilateral symmetry, wherein the at least five RF coils are coaxial ... each of said plurality of current patterns having zero net mutual inductive coupling to each of the other of said plurality of current patterns in a region of interest. Rather, Figure 7A and column 10, lines 1-23 teach sets of conductors, each set of embedded conductors forming an array coil for delivering NMR signal, where each set of embedded conductors can then be selected for imaging by connecting the corresponding conductors. There is no teaching to connect all the sets at once.

Claims 12 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Su *et al.*, US patent 6,493,572 B1 issued December 10, 2002, with an effective filing date of September 30, 1999. The Office Action states that with respect to currently amended claim 12 and corresponding new method claim 64, which depends from claim 51, Su *et al.*, lacks directly teaching or showing that "a second zero-flux contour with respect to the first magnetic field is located outside the pair of coils, further comprising a second single coil for generating a third magnetic field in the region of interest, wherein the second single coil is positioned at the second zero-flux contour with respect to the first magnetic field." However it would have been obvious to one of ordinary skill in the art at the time that the invention was made that the coil configuration of figure 4 can be duplicated, because normally a female patient has two breasts, so the capability of imaging both breasts simultaneously would be a readily recognizable advantage/modification of the Su *et al.*, reference. With respect to claims 12 and 64, the Su *et al.* reference does not teach a configuration, or method, wherein a second zero-flux contour with respect to the first magnetic field is located outside the pair of coils, further comprising a second single coil for generating a third magnetic field in the region of interest, wherein the second single coil is positioned at the second zero-flux contour with respect to the first magnetic field. There is no teaching or suggestion in the Su *et al.* reference for positioning a single coil outside the pair of coils. Figure 4 does teach such a limitation.

Submitted herewith is an unsigned Declaration Under 37 CFR §1.131 by the applicants which swears behind the filing date, September 30, 1999, of the Su *et al.* patent. Applicants will provide the executed Declaration to the Examiner under separate cover. Accordingly, the applicants assert that the rejections in the outstanding Office Action under 35 U.S.C. §102(e) and §103(a) based on the Su *et al.* patent are moot in view of the attached declaration antedating Su *et al.*

As the Su *et al.* reference is not prior art (see attached declaration under 37 CFR §1.131) and the Su *et al.* reference does not teach or suggest the invention of claims 1-17, 25-26, 36-41, and 45-78, the applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-17, 25-26, 36-41, and 45-78 under 35 U.S.C. §102(e) and §103(a).

In view of the foregoing remarks and the amendment above, the applicant believes that the currently pending claims are in condition for allowance, and such action is respectfully requested.

The Commissioner is hereby authorized to charge any fees under 37 CFR §§1.16 or 1.17 as required by this paper to Deposit Account No. 19-0065.

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The applicant also invites the Examiner to call the undersigned if clarification is needed on any of this response, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

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Attachments: 1. Declaration Under 37 CFR §131 (unsigned)
2. Information Disclosure Statement with form PTO/SB/08B and copy of cited reference.